Vision

metron 40 disk

USER'S MANUAL AND INSTRUCTIONS

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User's Manual and Instructions

Installation instructions	04
Warranty	04
Wheels package	07
Wheelset installation	08
Wheel Preload Hub Adjustment	09
Technical specifications	11
Spoke replacement and lacing	12
Replacement of the freehub body	13
Maintenance recommendations	14
Wheel replacement parts	15

INSTALLATION INSTRUCTIONS

Congratulations on your Vision product. Please read these instructions and follow them for correct use. Failure to follow the warnings and instructions could result in damage to product which is not covered under warranty, damage to bicycle or cause an accident resulting in injury or death. Since specific tools and experience are necessary for proper installation, it is recommended that the product be installed by a qualified bicycle technician.

WARRANTY

Full Speed Ahead (FSA) warrants all FSA, Gravity, Vision, Metropolis and RPM products to be free from defects in materials or workmanship for a period of two years after original purchase unless otherwise stated in the full warranty policy. The warranty is non-transferable and valid to the original purchaser of the product only. Full warranty policy is available at:

FULLSPEEDAHEAD.COM

⚠ WARNING Regularly check the wheels to be certain they are fastened securely to the bicycle fork. If the Quick Release or through axle are not istalled correctly, the wheel may become separated from the fork and result in an accident, personal injury or death.

⚠ WARNING Tires mounted on clincher wheels should not be inflated above 125 psi. (8.5 bar). Tires mounted on tubular wheels should be inflated per tire manufacturer recommendations.

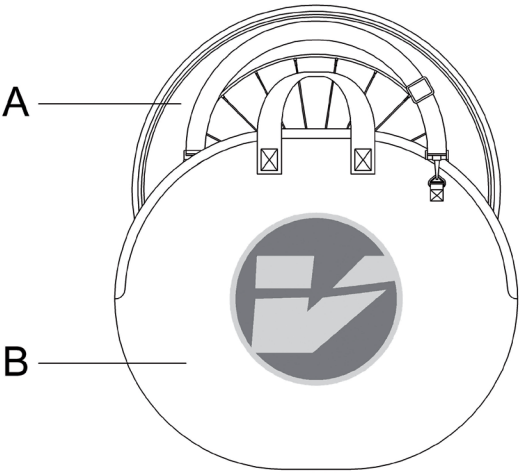
VISION METRON 40DB
(VT-840/DB - VT-840/DB-CL - VT-840CH/DB VT-840CH/DB-CL)

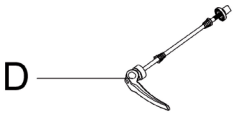
PRODUCT	ITEM CODE
METRON 40 DB CL Clincher VT840CH/DB-CL Front Wheel Red Decal	**710-0013073030**
METRON 40 DB CL Clincher VT840CH/DB-CL Front Wheel Grey Black Decal	**710-0013073031**
METRON 40 DB CL Clincher VT840CH/DB-CL Rear Wheel Shimano Red Decal	**710-0013084030**
METRON 40 DB CL Clincher VT840CH/DB-CL Rear Wheel Shimano Grey Black Decal	**710-0013084031**
METRON 40 DB CL Clincher VT840CH/DB-CL Wheelset Shimano Red Decal	**710-0013091030**
METRON 40 DB CL Clincher VT840CH/DB-CL Wheelset Shimano Grey Black Decal	**710-0013091031**
METRON 40 DB CL Tubular VT840/DB-CL Front Wheel Red Decal	**710-0029053031**
METRON 40 DB CL Tubular VT840/DB-CL Front Wheel Grey Black Decal	**710-0029053030**
METRON 40 DB CL Tubular VT840/DB-CL Rear Wheel Shimano Red Decal	**710-0029064031**
METRON 40 DB CL Tubular VT840/DB-CL Rear Wheel Shimano Grey Black Decal	**710-0029064030**
METRON 40 DB CL Tubular VT840/DB-CL Wheelset Shimano Red Decal	**710-0029101031**
METRON 40 DB CL Tubular VT840/DB-CL Wheelset Shimano Grey Black Decal	**710-0029101030**
METRON 40 DB Tubular VT840/DB Front Wheel Red Decal	**710-0148**
METRON 40 DB Tubular VT840/DB Front Wheel Grey Black Decal	**710-0148BKG**
METRON 40 DB Tubular VT840/DB RearWheel Red Decal	**710-0149**
METRON 40 DB Tubular VT840/DB Rear Grey Black Decal Wheel	**710-0149BKG**
METRON 40 DB Tubular VT840/DB Wheelset Shimano Red Decal	**710-0152**
METRON 40 DB Tubular VT840/DB Wheelset Shimano Grey Black Decal	**710-0152BKG**
METRON 40 DB Clincher VT840CH/DB Wheelset Shimano Red Decal	**710-0154**
METRON 40 DB Clincher VT840CH/DB Wheelset Shimano Grey Black Decal	**710-0154BKG**

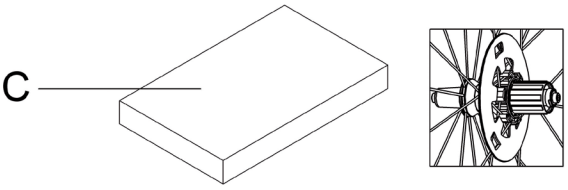
WHEELS PACKAGE

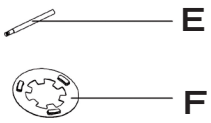
A. Wheels
B. Wheels bag
C. Accessories bag + Instructions
D. Quick Release (QR)
E. Brake Pads
F. Valve Extensions (only VT-840/DB - VT-840/DB-CL)
G. Spoke Protector

⚠ WARNING Vision Spoke Protector is intended to prevent the chain from falling down in the spokes. Please install it on the rear wheel before riding.





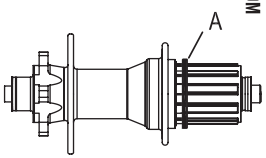




WHEELSET INSTALLATION

1.For mounting tires, carefully follow the instructions provided by the tire manufacturer.

2.Apply light grease onto the Freehub Body. Install the cassette per manufacturer's recommendations. The Shimano freehub body is compatible with S11 cassette. A spacer (A) is required when mounting S9 & S10 cassette.



⚠ WARNING **Do not use Vision carbon specific pads with non carbon (alloy) rims.**

3. Insert the Quick Releases into the wheel. The lever of the Quick Releases should go on the non-drive side. Thread the Quick Release nut, but do not tight.

Note: Front Quick Release is shorter than rear.

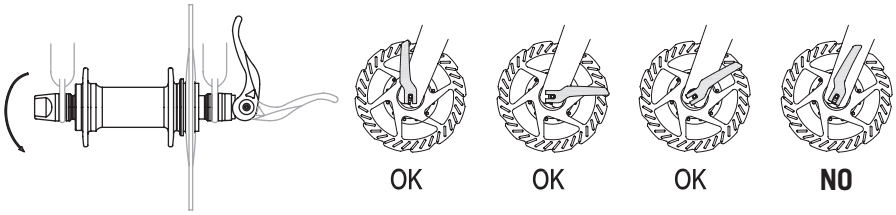
4. Install the Front and Rear Wheel into the drop-outs of the fork and frame. With the QR lever in the open position, tighten the QR until it is in contact with the frame or fork dropouts. Close the QR lever. The QR lever should require substantial effort to close the last 25-30 degrees. If it closes with only moderate hand pressure, the QR must be readjusted by opening the QR lever, then turning the QR nut clockwise until the closing action of the QR lever requires the recommended force.

⚠ WARNING • If you are unfamiliar with Quick Release assembly it is recommended to ask for advice from your local bike shop. Riding with an improperly assembled Quick Release can cause the wheel to shift while in use resulting in accident and injury.

• Regularly check the QR adjustment. If the Quick Release is not installed correctly, the wheel may become separated from the fork and result in an accident, personal injury or death.

• Always close the skewer lever completely. Do not allow a frame or fork tube or any other member to inhibit full lever travel when closing. Failure to close the lever completely will limit cam engagement and the skewer's ability to hold the wheel in place.

Note: The QR must be periodically lubricated at the pivot points so it can exert maximum sideways force.



⚠ WARNING • If you use through axle fixing device check instructions of through axle manufacturer

TECHNICAL SPECIFICATIONS

Wheel Description	Metron 40 Disc Metron 40 Disc Centerlock Metron 40 Clincher Disc Metron 40 Clincher disc Centerlock
Model number	WH-VT-840/DB WH-VT-840/DB-CL WH-VT-840CH/DB WH-VT-840CH/DB-CL
Rim size	Tubular 633x24 Clincher 700x17C
Rim width / height	Tubular 24mm / 40mm Clincher 25mm / 40mm
Spokes Gauge / End	AE-14G / J-Bend
Nipples	15mm ABS Brass - external

	Spokes Lengths / Number x Crossing Pattern			
	Front		Right	
Model number	Left	Right	Left	Right
WH-VT-840/DB **WH-VT-840CH/DB**	269mm / 12x2	274mm / 12x2	269mm / 14x2	278mm / 14x3
WH-VT-840/DB-CL **WH-VT-840CH/DB-CL**	274mm / 12x2	274mm / 12x2	281mm / 14x3	278mm / 14x3

⚠ WARNING Use original Vision spare parts only for your service. Use of incorrect spoke types and lengths may cause failure of the wheel resulting in accident and person injury.

WHEEL TRUING

⚠ CAUTION Bicycle wheels are straight, round, and stable because of a balance of spoke tension. The rim's shape can be changed by tightening and loosening spoke's nipples. Wheel truing should be performed by persons with adequate wheel truing experience or training. If you do not have confidence or experience with wheel truing, take the wheels to a qualified technician for service.

SPOKE REPLACEMENT AND LACING

⚠ CAUTION CAUTION Before replacing a spoke, please check the above technical specifications for the correct spoke length and type.

Always use original Vision spare parts before proceeding with the replacement.
1. Depending on the side where the broken spoke is, remove disk brake rotor or cassette
2. Remove the spoke and nipple to be replaced and install the new one with proper positioning to adjacent spokes
3. Secure the spoke to the rim by tightening the nipple
4. Use a spoke tension measuring device to follow the recommended tension as in the chart below
5. After replacing the spoke, tensioned and centered the wheels, check that the flat spoke (aero) is oriented in the aerodynamic position and is not twisted
6. Mount disk brake rotor or cassette

⚠ WARNING Maximum spoke tension must not exceed the tension specification (see chart below). Using tension above max recommended tension will void warranty and cause wheel failure resulting in serious accidents and injury. If tension above maximum is necessary to true the wheel, the rim may be damaged and should be replaced.
Always avoid the rotation of the spoke (spoke wind-up) when the nipple is tightened or loosened by using an anti-rotation spoke tool.

RECOMMENDED SPOKE TENSION			
Front Wheel		Rear Wheel	
Left Side	Right Side	Left Side	Right Side
90 - 110 kg	60 - 80 kg	60 - 80 kg	100 - 120 kg

DISC BRAKE ROTOR INSTALLATION AND REPLACEMENT

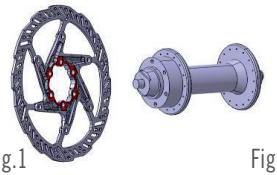


Fig.1

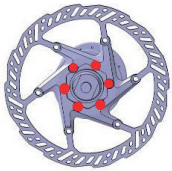


Fig.2

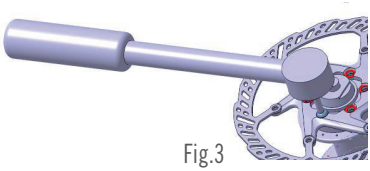


Fig.3

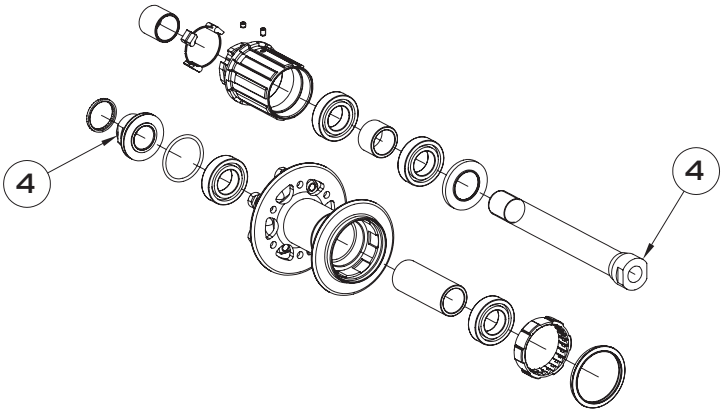
Figures:
1. 6-bolts rotor and hub
2. Disc screws (6 pcs)
3. Torque wrench

Tools needed:
1. T25 TORX® wrench
2. Lint-free rags
3. Torque wrench (5.7-6.3Nm)
4. Isopropyl alcohol

Installation procedure
1. Remove the wheel
2. Using a T25 Torx® wrench remove the disc
3. Clean NEW disc and wheel hub with Isopropyl alcohol, ensuring that the hub threads and hub mounting surface are free of dirt and grit
4. Place the disc on the hub mounting surface with the markings facing outward from the spokes. Ensure the arrow on the disc is pointing in the direction of forward wheel rotation. (Fig 1)
5. Install all 6 bolts and snug hand tight. (Fig 2)
6. Using a T25 Torx® wrench, tighten the disc screws (6 pcs) in a star pattern to 6 Nm. (Fig 3)
CAUTION: Do not over tighten the disc screws, to prevent damage to the threads, disc, or screws.
7. Reinstall the wheel
8. Spin the wheel to ensure that the rotor is not rubbing against the brake pads. If there is rubbing, re-align the caliper.

REPLACEMENT OF THE FREEHUB BODY

1. Unscrew the axle using 17mm wrench until the left side end nut is removed (4)
2. Slide the axle out of hub shell
3. Remove freehub sliding it along the axle
4. Insert the new freehub body on the axle and insert the axle inside the hub shell
5. Turn freehub till all the pawls are in line with ratchet and then fully insert the freehub body
6. If necessary, add low-friction grease to preserve the freehub body mechanism
7. Screw the left side end nut at an approximate torque of 8 Nm



WHEEL MAINTENANCE RECOMMENDATIONS

It is the user's responsibility to examine the product on a regular basis to determine the need for service or replacement. Cyclists should inspect their bicycle and parts on a regular basis in order to detect damage that may have occurred from normal use or for missing parts. Check all parts for damage and wear before every use. Should any problems or concerns arise, discontinue riding the bicycle and have it inspected by a qualified bicycle technician.

⚠ WARNING Using wheels that have not been installed or centered correctly, present broken, damaged, or has missing parts may fail or cause rider to lose control of bicycle leading to accident, resulting in personal injury or death.

HUB MAINTENANCE

Vision hubs are equipped with high grade, precision, sealed cartridge bearings. Due to varying factors it is important to have the hub bearings inspected and maintained periodically. The recommended service intervals are:

- Inspection after each riding season, one calendar year, or 8,000 to 10,000 Km, whichever comes first.
- After use in rain, storm, muddy, and wet conditions
- Anytime rotational smoothness, signs of corrosion, damage to rubber seals and bearing covers is apparent.

Tech Tips:

- Avoid getting solvents, aerosol lubricants (as for chain), and strong cleaning solutions on the hubs. The solvent can wick passed the seals and break down the bearing grease.
- When washing the bike, use only mild soap and a gentle stream of water for rinsing. Always avoid pressure washing. Such systems can direct super heated water with special wetting agents at 10X atmospheric pressure, forcing water passed the bearing seal and removing vital bearing grease.

⚠ CAUTION Since specific tools and experience are necessary for hub maintenance, it is recommended that the service should be done by a Vision Authorized Service Center.
Please contact the Authorized Vision Distributors and Warranty Service Centers closest to your country of residence. A list of Authorized is posted at **VISIONTECHUSA.COM.**

RIM MAINTENANCE

-When braking, especially during descents, use both front and rear brakes. Front and Rear brakes have different benefits and limitations, so use them according to instructions from an experienced rider. It is important that both rims are employed during descents to properly dissipate heat.
-If, during frequent inspections, noticeable impact damage or any other deformation of the rim is apparent, discontinue use and immediately seek advice from an experienced mechanic. If an experienced mechanic is unavailable, contact Vision directly at
VISIONTECHUSA.COM.

⚠ WARNING In the event of a bicycle accident, discontinue riding the bicycle until it has been thoroughly examined by a qualified bicycle mechanic, and any damaged parts replaced.

WHEEL REPLACEMENT PARTS:

Replacement parts are available for purchase through all bicycle service and retail locations. If the bicycle shop does not stock the necessary parts, it can be ordered by the retail location from a VISION distributor or VISION directly. A list of distributors is available at **VISIONTECHUSA.COM.**

FULL SPEED AHEAD EUROPE
VIA DEL LAVORO, 56
20874 BUSNAGO, MILAN, ITALY
PH. +39 039 688 52 65
FAX +39 039 682 33 36

FULL SPEED AHEAD USA
12212 CYRUS WAY
MUKILTEO, WA 98275-5702
PH. +1 425 488 86 53
FAX +1 425 489 10 82

TH INDUSTRIES
NO.6, WUGONG 8TH RD., WUFENG DIST.,
TAICHUNG CITY 41353 - TAIWAN (R.O.C.)
PH. +886 4 2331 9134
FAX +886 4 2331 1943

If you have questions, please visit our web site contact page at:
VISIONTECHUSA.COM.

Notes: Specifications of product may be changed or improved for performance. Please refer to website periodically for technical updates and revised instructions.